REMARKS

Claims 1-3, 8-10, and 14-23 are currently pending in the application.

The Specification has been amended in paragraphs at page 1 and at pages 5-6, as shown above, to identify the serial number of the co-pending patent application, "A Method and System for Providing a Common Collaboration Framework Accessible from Within Multiple Applications," the disclosure of which has been incorporated by reference into the present patent application, as U.S. Patent Application Serial No. 10/662,617. (On March 15, 2005, this application was published as U.S. Patent Application Publication No. 2005/0060371A1.) The referenced application was, at the time of filing, sufficiently identifiable for the Examiner to be able to make reference to it by serial number in requesting this clarification. (Office Action at 2) No new matter has been added.

Claim 1 has been amended at line 3 by adding the phrase "a data processing system processing," support for which may be found in the Specification at page 1 (line 17). In addition, Claim 1 has been amended at by adding the requirement "a user control that enables a user to create a collaboration space, to associate the collaboration space with a context, and to perform at least one of adding, editing, and deleting a collaboration member in the collaboration space, said collaboration space containing at least one of a role player and a discussion thread," support for which may be found in the Specification at page 8 (lines 18-26). Also, Claim 1 has been amended at by changing "a monitor that captures user and environment events" to "a monitor that captures a user action in a development environment and determines a context associated with said user action," support for which may be found in the Specification at pages 10 (line 24) – 11 (line 4). Further, Claim 1 has been amended by moving the substance of original lines 10-14 forward in the claim and by changing "a context manager that maintains relationships and resources within contexts" to "a context manager that performs at least one of creating a context, adding a resource and a relationship to said context, and

deleting a resource and a relationship from said context," support for which may be found in the Specification at page 10 (lines 13-16). Finally, Claim 1 has been amended by changing "a viewer that presents collaboration elements based on a current developer context" to "a viewer that displays in a graphical user interface display window content of a collaboration space relevant to a current context, said current context including at least one of role players, online status, e-meeting links, and discussion threads," support for which may be found in the Specification at pages 8 (line 18) – 9 (line 8). Use of the phrase "in a graphical user interface display window" at line 15-16 of Claim 1, is supported by Figures 2 and 2A, each figure being identified as a "screen print" in the Specification at page 8 (line 18) and at page 9 (line 11).

Claim 2 has been amended by adding "the user control" at line 1, to reflect the amendments to Claim 1 and by changing "collaborative plugin" at lines 2 and 4 to "collaboration plugin" to more closely track the terminology of the Specification at page 5 (lines 18, 22), page 7 (lines 5, 7, 24), page 8 (lines 2, 8-9, 11, 18), and page 5 (line 5).

Claim 3 has been amended at lines 1-6 by changing "wherein the collaborative plugin further comprises a user interface component adapted to define contexts and collaboration spaces" to "wherein the collaboration plugin allows a first user to communicate with one or more other users and to gain access to resources of the context in which said first user is working without said first user having to leave said first user's development environment and without said first user having to switch to a different collaboration application," support for which may be found in the Specification at page 5 (lines 17-24).

Claims 4-7 have been cancelled.

Claim 8 has been amended in a manner similar to claim 1. Claim 8 has been amended by adding "enabling a user to create a collaboration space, to associate the collaboration space with a context, and to perform at least one of adding, editing, and deleting a collaboration member in the collaboration space, said collaboration space containing at least one of a role player and a discussion thread," support for which may be

found in the Specification at page 8 (lines 18-26). In addition, Claim 8 has been amended by changing "capturing user and development environments" to "capturing a user action in a development environment and determining a context associated with said user action," which is supported in the Specification at pages 10 (line 24) – 11 (line 4). Also, Claim 8 has been amended by changing "maintaining relationships and resources within contexts" to "performing at least one of creating a context in said data processing system, adding a resource and a relationship to said context, and deleting a resource and a relationship from said context," which is supported in the Specification at page 10 (lines 13-16). Finally, Claim 8 has been amended by changing "presenting collaboration elements based on a current developer context" to "displaying in a graphical user interface display window content of a collaboration space relevant to a current developer context, said current developer context including at least one of role players, online status, e-meeting links, and discussion threads," which is supported in the Specification at pages 8 (line 18) – 9 (line 8). Use of the phrase "in a graphical user interface display window" at line 15-16 of Claim 1, is supported by Figures 2 and 2A, each figure being identified as a "screen print" in the Specification at page 8 (line 18) and at page 9 (line 11).

Claim 9 has been amended to reflect subject matter discussed on page 8 of the application. See lines 16-19.

Claim 10 has been amended by changing "presenting" to "displaying" at line 2 to reflect the amendments to Claim 8, above, and by changing "collaborative plugin" at lines 2 and 4 to "collaboration plugin" to more closely track the terminology of the Specification at page 5 (lines 18, 22), page 7 (lines 5, 7, 24), page 8 (lines 2, 8-9, 11, 18), and page 5 (line 5).

Claim 14 has been amended by changing "managing the life cycle of collaboration spaces" to "managing a life cycle of one or more collaboration spaces" at line 2. Figure 1 shows the instant messaging server 16, the team room server 17, and the e-mailing server 18.

Claims 15 and 20 have been added, claiming "[t]he system in claim 1, wherein the user control allows the user to enable and disable context sensitivity and to open a collaboration space manually." Support for Claims 15 and 20 may be found in the Specification at page 10 (lines 13-23).

Claims 16 and 21 have been added, claiming "[t]he system in claim 1, wherein the user's actions include at least one of editing a file, expanding a directory, and selecting a pull-down menu. Support for Claims 16 and 21 may be found in the Specification at page 11 (lines 5-9), and at Figures 2, 2A, and 3.

Claims 17 and 22 have been added, claiming "[t]he system in claim 1, wherein said context is a project." Support for Claims 17 and 22 may be found in the Specification at page 9 (lines 6-7).

Claims 18 and 23 have been added, claiming "[t]he system in claim 1, further comprising a collaboration manager for managing the life cycle of collaboration spaces (claim 23) and for directing collaborative operations to external collaboration servers, said collaboration servers including one or more of an instant messaging server, a team room server, and an e-meeting server." Support for Claims 18 and 23 may be found in the Specification at page 6 (lines 21-27).

Claim 19 has been added, claiming "[t]he system in claim 18, wherein said collaboration manager is operatively coupled with said collaboration plugins and said external collaboration servers." Support for Claim 19 may be found in the Specification at page 6 (lines 21-27).

The Claimed Invention

The claimed invention provides a method and data processing system for collaborative development environments which allow physically separated members of a team to work effectively together. Previously, firms engaged in people-to-people collaboration using technologies such as telephones, facsimile machines, email, and in-person meetings. More recently, this has been supplemented by Internet-based collaboration technologies such as instant messaging, electronic meetings (e-meetings), and team rooms.

A collaboration plugin provided by the claimed invention includes a monitor, a viewer and user control. (Specification at 5, lines 22-24; Figures 2, 2A) A context refers to the interrelated aspects of a business solution, within which collaboration may occur. (Specification at 3, line 23-25) A collaboration space may contain one or more collaboration elements that have potentially different collaboration modalities in association with a business context; *e.g.*, role players, discussion threads, e-meetings, annotated documents, etc. (Specification at 4, lines 1-4)

The claimed invention provides a common substrate for members of a project team that use distinct development environments, each instrumented with a <u>viewer</u> to the collaboration space. Further, the viewer presents a personalized view to different team members that is adapted to the members' current tasks and needs. (Specification at 4, lines 7-11; Figures 2, 2A)

As a result, the claimed invention claims, among other things, a data processing system and a method of using a data processing system in which a monitor captures user and environment events, a context manager maintains relationships and resources within contexts, and a viewer presents collaboration elements in a graphical user interface display window based on a current developer context. (Claims 1, 8)

As discussed below, Claims 1-14 have been rejected under 35 U.S.C. § 102(e) as anticipated by the disclosure of Ruths et al., U.S. Patent Application Publication

No. 2003/0018719 A1. The following differences, however, exist between Ruths et al. and the claimed invention:

- Ruths et al. teach collaboration between applications, while the claimed invention teaches collaboration between people.

- Ruths et al. teach collaboration in the form of shared data object (a.k.a. data-centric abstraction), while the claimed invention teaches collaboration in the form of instant messaging, discussion threads, e-meetings, and so forth.

- Ruths et al. teach a general platform for collaboration-enable any applications, while the claimed invention teaches how to collaboration-enable a particular application, *i.e.*, a development environment.

- The subject matter disclosed by Ruths et al. uses a collaborative platform and adapters to avoid changing the applications themselves (*see* Figure 2 of Ruths), while the claimed invention explicitly instruments/modifies the application (*i.e.*, the development environment) with collaboration plugins (*see* Figure 1 of the Specification).

Rejection of Claims 1-7 Under 35 U.S.C. § 101

Independent Claim 1 and dependent Claims 2-7 have been rejected under 35 U.S.C. § 101 as directed to nonstatutory subject matter, on the basis that the claims as originally presented were directed to software not combined with a physical medium. In view of the current amendments to independent Claim 1, however, the Examiner's objections no longer appear to be applicable.

Rejection of Claims 1-14 Under 35 U.S.C. § 102(e)

Claims 1-3 and 8-14 stand rejected under 35 U.S.C. § 102(e) as anticipated by the disclosure of Ruths et al., U.S. Patent Application Publication No. 2003/0018719 A1.

Applicants traverse on the basis that Ruths et al. do not anticipate these claims.

Claim 1. The Examiner erroneously reads Ruths et al. as anticipating the following features of independent Claim 1 (as originally stated, prior to the current amendments):

- A system implementing a collaborative development environment among a team of developers (Office Action at 4, erroneously finding this requirement to be anticipated by Ruths et al. at paragraphs [0049] and [0050])

- A monitor that captures user and environment events (Office Action at 5, erroneously finding this requirement to be anticipated by Ruths et al. at paragraphs [0052], [0071], and [0073])

- A context manager that maintains relationships and resources within contexts (Office Action at 5, erroneously finding this requirement to be anticipated by Ruths et al. at paragraphs [0057], [0069], and [0113])

- A viewer that presents collaboration elements based on a current developer context (Office Action at 5, erroneously finding this requirement to be anticipated by Ruths et al. at paragraphs [0085] and [0139])

Ruths et al. do not anticipate a collaborative development environment "among a team of developers" (Claim 1, line 2) because Ruths et al. teach collaboration and interconnection between devices and applications without contemplation of collaboration among human member of a team of developers, as in Claim 1 of the claimed invention. While paragraph [0049] of Ruths et al. speaks of "participants," it is readily apparent that this refers to "participants devices" (Ruths et al., paragraph [0049]) and not members of a human development team. Similarly, paragraph [0050] of Ruths et al., on which the Examiner also relies in this regard, speaks of "participant applications" and not of members of a human development team. References to "participant devices" appear in paragraphs [0013], [0014], [0019], [0020], [0022], [0023], [0049], [0050], [0052], [0053], [0055], [0056], [0058], [0059], [0068], [0071], [0072], [0078, [0083], [0122], and [0125] of the disclosure of Ruths et al., as well as in Figures 2, 3, 5, and 6, and in applied-for claims 1, 2, 3, 4, 6, 8, 9, 10, 11, 13, 14, and 15 by Ruths et al. Ruths et al. do not, therefore, anticipate the "system implementing a collaborative development environment among a team of developers" of Claim 1.

The "monitor" of Claim 1, line 8, is not analogous to the features discussed by Ruths et al. at paragraphs [0052], [0071], and [0073]. The monitor of Claim 1 is discussed in the Specification at 5, lines 22-24, with reference to the user interfaces shown in Figures 2 and 2A. The disclosure of Ruths et al., however, is not concerned with user interfaces but with applications program interfaces (paragraph [0073]) and the connection of applications over local area networks (paragraphs [0052], [0071]). It is, therefore, apparent that Ruths et al. do not anticipate the "monitor that captures a user action in a collaboration environment and determines a context associates with said user action" required by Claim 1.

The "context manager" of Claim 1, line 10, is not analogous to the features discussed by Ruths et al. at paragraphs [0057], [0069], and [0113] of their disclosure. The Specification expressly discusses "context manager" with reference to co-pending Patent Application Serial No. 10/662617, which has been incorporated by reference.

(Specification at 6, lines 2-5) In that co-pending patent application, as published, "[t]he context manager maintains resources and resource interrelationships within contexts. The resources can include collaboration elements, processes, tasks, business objects, users, and/or roles." (U.S. Patent Application Publication No. 2005/0060371A1, paragraph [0005]) The portions of the disclosure of Ruths et al. cited in support of rejection on this point, by contrast, discuss the interaction of participant devices and/or participant applications with a collaborative platform or a collaborative or development environment. Paragraph [0057] of Ruths et al. discusses the interaction of participant devices with a collaborative platform, without regard to collaboration among members of a development team. Paragraph [0069] discusses, *inter alia*, "[a] session manager [that] manages the low level network connections between the local collaborative platform and a remote collaborative platform." Paragraph [0113] concerns the ability of the disclosed subject matter to provide multiple representations of a single set of data. In view of these differences, it is apparent that Ruths et al. do not anticipate the "context manager that performs at least one of creating a context, adding a resource and a relationship to said context, and deleting a resource and a relationship from said context" required by Claim 1 as amended.

The "viewer" of Claim 1, line 15, is not analogous to the features discussed by Ruths et al. at paragraphs [0085] and [0139] of their disclosure. The viewer of Claim 1 is discussed in the Specification at 5, lines 22-24, with reference to the user interfaces shown in Figures 2 and 2A. The disclosure of Ruths et al., however, is concerned, not with user interfaces, but with enabling applications to view each other's resources without regard to any teamwork being engaged in by users of those applications.
Paragraph [0085] of Ruths et al. gives the example of "a collaborative environment [with] three different types of participants: a database, a desktop PC running a spreadsheet application, and a PDA using a native spreadsheet program." It is therefore clear that paragraph [0085] discloses interoperation among participant <u>devices</u>, as elsewhere in the disclosure of Ruths et al., and does not anticipate the viewer of Claim 1. Similarly,

paragraph [0139] discusses "session security" and "resources security" and provides, as an example, "file permissions on the participant level in the operating system may be enforced within the collaborative platform for that participant." It is, therefore, apparent that Ruths et al. do not anticipate the "a viewer that displays in a graphical user interface display window content of a collaboration space relevant to a current context, said current context including at least one of role players, online status, e-meeting links, and discussion threads" required by Claim 1.

Claim 2. Claim 2 has been rejected on the basis that the requirement "wherein . . . the monitor and the viewer comprise a collaboration plugin to an integrated development environment that provides a user with tools for use in the development environment, there being a collaboration plugin for each user workstation" (Claim 2, lines 1-4) is anticipated by the features discussed by Ruths et al. at paragraphs [0051] and [0059] of their disclosure. The disclosure of Ruths et al. concerns the interoperation of "participant devices" (paragraph [00510]) including a "software system stored in one or more memory devices and executed on one or more processors of a participant device" (paragraph [0059]) and does not anticipate "an integrated development environment that provides a user with tools." (Claim 2, lines 2-3). The disclosure of Ruths et al. thus does not involve collaboration among human team participants but instead relates to collaborative interoperation among devices and applications. In addition, Claim 2 should be allowed as dependent from allowable Claim 1.

Claim 3. Claim 3 was rejected, prior to the current amendments, on the basis that the collaboration plugin as required in Claim 3 is anticipated by the features discussed by Ruths et al. at paragraphs [0067], [0085], [0111], [0112], [0113], and [0114] of their disclosure. The "collaboration plugin" of Claim 3 is discussed in the Specification at 5, lines, 22-24, by reference to Figures 2 and 2A, which are screen shots of user interfaces. By contrast, paragraph [0067] of Ruths et al. discusses the kernel of a "collaborative platform" which "may maintain a collaborative data resources data resource registration to which collaborative data resources may be registered and unregistered." (Ruths et al.,

paragraph [0067]) Unlike the user interface provided by the collaboration plugin of Claim 3, the collaborative platform of Ruths et al. appears to be separated from any user awareness by at least one application layer. The two are not analogous. Paragraph [0085] of Ruths et al. states that "[t]he collaborative platform may allow the spontaneous creation of collaborative groups by entering into a session with other participant" and gives, as an example, "a collaborative environment [with] three different types of partipants: a database, a desktop PC running a spreadsheet application, and a PDA using a native spreadsheet program." It is therefore clear that paragraph [0085] discloses a collaborative interoperation among participant <u>devices</u>, as elsewhere in the disclosure of Ruths et al., and does not anticipate Claim 3 of the claimed invention, which is directed to collaboration among team members. Paragraphs [0111], [0112], [0113], and [0114] of Ruths et al. concern the ability of the disclosed subject matter to provide multiple representations of a single set of data and do not involve providing user interfaces to enable collaboration among members of a development team, as in Claim 3. In addition, Claim 3 should be allowed as dependent from allowable Claim 1. Finally, the current amendments to Claim 3 clarify the distinctions between this claim and the subject matter disclosed by Ruths et al.

Claim 8. The rejection of Claim 8 is derivative of the rejection of Claim 1. As a result, the foregoing discussion of Claim 1 is incorporated by reference as if fully restated herein as pertinent to the rejection of Claim 8.

Claim 9. The rejection of Claim 9 is derivative of the rejection of Claim 3. As a result, the foregoing discussion of Claim 3 is incorporated by reference as if fully restated herein as pertinent to the rejection of Claim 9.

Claim 10. The rejection of Claim 10 is derivative of the rejection of Claims 1 and 3. As a result, the foregoing discussion of Claims 1 and 3 is incorporated by reference as if fully restated herein as pertinent to the rejection of Claim 10.

Claim 14. The rejection of Claim 14 is derivative of the rejection of now-cancelled Claim 7, which was, in turn, derivative of the rejection of Claim 3. As a

result, the foregoing discussion of Claim 3 is incorporated by reference as if fully restated herein as pertinent to the rejection of Claim 14.

Conclusion

In view of the foregoing, Applicants submit that Claims 1-3 and 8-23 are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed.

Applicants hereby make a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Applicants' Deposit Account No. 50-0510 (IBM Corporation).

Respectfully submitted,

Michael E. Whitham
Registration No. 32,635

Whitham, Curtis Christofferson & Cook, P.C.
11491 Sunset Hills Road, Suite 340
Reston, Virginia 20190
Tel. (703) 787-9400
Fax. (703) 787-7557